

Iowa Area-Wide Optimization Program

The Iowa Area-Wide Optimization Program (AWOP) is an effort to improve the performance of surface water treatment facilities. AWOP focuses on particle removal and disinfection to maximize public health protection from microbial contaminants.



The Iowa Department of Natural Resources has adopted performance goals for all conventional treatment surface water and influenced groundwater treatment plants in the state.

Optimized Performance Goals

Filtration

- Filtered water turbidity is less than 0.1 NTU 95% of the time, based on maximum values recorded during 4-hour time intervals (excluding 15 minutes after filter backwash).
- Filtered water is below 0.1 NTU within 15 minutes of filter being in production.
- Maximum filtered water turbidity below 0.3 NTU.
- Filters are backwashed before breakthrough.
- Raw water turbidity changes do not affect filtered water turbidity.

Disinfection

- Required CT values are achieved at all times.

Sedimentation

- Settled water turbidity less than 1 NTU 95% of the time when annual average raw water turbidity is less than or equal to 10 NTU.
- Settled water turbidity less than 2 NTU 95% of the time when annual average raw water turbidity is greater than 10 NTU.

Turbidity Monitoring

- Daily raw water turbidity is monitored once per day.
- Settled water turbidity is monitored at 4-hour time increments from each sedimentation basin.
- Effluent turbidity is continuously recorded for each filter.
- Combined filter effluent turbidity is continuously recorded.